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by

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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I. OVERVIEW

This report continues an annual series of publications on the economic status of the California pink shrimp fishery. The economic status of the 1985 California pink shrimp fishery is compared to the 1984 season in this report.

The Washington, Oregon, and California pink shrimp catch improved substantially in 1985. A total of 27.2 million pounds of pink shrimp (Pandalus jordani) were landed in the three states. This was close to three times the 1984 record low catch of 9.8 million pounds but still substantially below the 10-year average of 42.1 million pounds (Table 1). California shrimp landings more than doubled to 3.3 million pounds, the highest seasonal total since 1982. The 1985 landings for California apparently have recovered from unusually low levels seen in 1983 and 1984 and are expected to improve again in 1986. This recovery has been due primarily to a 140 percent increase in catch from the historically productive beds off the Eureka/Crescent City area (Table 2).

II. COMPONENTS OF THE FISHERY

For management purposes, the pink shrimp population is divided into 10 subunits according to the physical separation of the shrimp beds along the coast. Those beds important in California occur off of Eureka (State area A), Fort Bragg (area B-1), Bodega Bay (area B-2), and Morro Bay (area C). The Eureka/Crescent City beds extend into Oregon state waters and generally have been the most productive.

The California shrimp resource is exploited exclusively by commercial double-rig and single-rig otter trawl vessels. The commercial fleet mainly consists of combination vessels which are capable of switching into the groundfish, crab, salmon, and albacore fisheries. There is no recreational fishery for the pink shrimp resource.

III. HARVESTING SECTOR

Due to the significant increase in shrimp abundance, the number of vessels landing shrimp in Washington, Oregon, California increased in 1985 to 118, compared to 98 in 1984. However, in California the number of trawl vessels landing shrimp declined from 42 in 1984 to only 31 in 1985. Of these 31, 24

were based in California, while 7 were from Oregon and Washington home ports. Most of the vessels leaving the California shrimp fishery in 1985 fished for shrimp in Oregon and Washington. Oregon and Washington shrimp landings were up by 207 percent and 165 percent, respectively. Participation in the shrimp fishery in Oregon and Washington rose substantially due to the productive season in 1985. Twelve California vessels landed shrimp in Oregon and Washington in 1985 compared to 6 California trawlers landing to the north in 1984. At the same time, in 1985, 7 Oregon vessels migrated to the south and landed shrimp in California, compared to 10 in 1984.

The exvessel value of California shrimp landings in 1985 was \$1.14 million, up 67 percent from the landed value of only \$685,000 recorded for the 1984 season. However, the average exvessel price paid for California shrimp fell for the second consecutive year to \$0.35 per pound compared to the 1984 seasonal average price of \$0.46 per pound. Along the entire coast the average exvessel price was also \$.35 per pound, the lowest it has been since 1979. Despite sharply lower exvessel prices, landings improved enough to produce higher landed values in all three states.

The combination of significantly higher landings and a smaller trawl fleet caused average landings per vessel to

increase to approximately 105,100 pounds for California shrimpers. In 1984, shrimp trawlers landed an average of only 35,500 pounds per vessel. Average gross revenues per vessel increased to almost \$37 thousand in 1985, an increase of 126 percent over 1984.

To supplement income generated from shrimp landings, shrimp trawl vessels participate in several alternative fisheries. The Alaskan pink shrimp fishery was a poor alternative in 1985 because landings fell to a record low of only 3.3 million pounds, or 65 percent lower than the 9.3 million pounds landed in 1984. Production in the West Coast groundfish fishery has stabilized and continues to be restricted by strict trip limit controls on several rockfish species. Consequently, many trawl vessels that relied on groundfish when shrimp landings were extremely depressed transferred back to the pink shrimp fishery. The once lucrative Dungeness crab fishery proved to be an unprofitable alternative for shrimpers in 1985 since landings remained at extremely low levels.

IV. PROCESSING AND MARKET SECTOR

The total amount of pink shrimp landed on the West Coast increased in 1985. The combined landings from Washington, Oregon, California and Alaskan pink shrimp fisheries were 30.6

million pounds, up 60 percent from 1984. Conversations with several shellfish wholesalers and processors located on the West Coast indicate that the bulk of these landings enter West Coast markets. The domestic product is marketed in three forms: 1) fresh, 2) cooked and peeled, frozen and vacuum packed in five pound tins, and 3) in recent years individually quick frozen. Because of its high quality and moderate size (300-500 count-per-pound in processed form), domestic pink shrimp is well suited for the cocktail and salad shrimp markets on the West Coast.

The other major source of supply in the West Coast cocktail and salad shrimp market is imports of cold water shrimp especially from Norway. The Norwegian product is similar in size and texture to domestic pink shrimp and is marketed as individually quick frozen shrimp. Imports of individually quick frozen or peeled, other fresh and frozen shrimp entering West Coast ports are available from statistics published by the Bureau of the Census, U.S. Department of Commerce. Although the port of entry may not indicate the final destination for the imported product, it is assumed that Norwegian shrimp imports remain in West Coast markets. A total of 8.7 million pounds of individually quick frozen shrimp were imported from Norway to the West Coast in 1985, an increase of 13 percent from 1984 (Table 3). Consequently, with the domestic catch up in 1985, the total quantity of cold water shrimp supplied to the West Coast probably

increased in 1985.

The more traditional product forms produced by West Coast processors are cooked and peeled shrimp, frozen and vacuum packed in five pound tins and fresh cocktail shrimp. In 1985 all of the California processors engaged in shrimp production marketed traditional product forms, whereas several processors in Oregon and Washington produced the individually quick frozen product (P. Collier, CDFG, Eureka, pers. comm.). Although the market for the tin product has been a reliable source of sales in the past, the apparent trend toward consumer preference for the individually quick frozen product has concerned processors with facilities suitable for only packing shrimp in tins (Shafer, 1986). The California Department of Fish and Game reports that some California processors are producing individually quick frozen shrimp for the first time in 1986 (P. Collier, CDFG, Eureka, pers. comm.).

Literature Cited

Shafer, S. 1986. Shrimp. Pacific Fishing Yearbook 7(4):95-98.

Table 1 - Annual Landings (1000 lbs) and Exvessel Value (1,000 dollars) of Pink Shrimp in California, Oregon and Washington from 1975-1985.

Year	<u>California</u>		<u>Oregon</u>		<u>Washington</u>		<u>Total</u>	
	<u>Lbs</u>	<u>\$</u>	<u>Lbs</u>	<u>\$</u>	<u>Lbs</u>	<u>\$</u>	<u>Lbs</u>	<u>\$</u>
1975	4,998	665	24,084	3,237	10,023	1,415	39,105	5,317
1976	3,501	683	25,456	5,091	9,310	1,654	38,267	7,428
1977	15,871	3,609	48,580	11,200	11,804	2,604	76,255	17,413
1978	13,887	3,654	56,666	14,904	12,264	3,000	82,817	21,558
1979	5,183	1,998	29,587	11,340	12,283	4,513	47,053	17,851
1980	3,560	2,006	30,152	16,683	12,688	6,764	46,400	25,453
1981	3,892	1,970	25,924	13,046	10,084	5,027	39,900	20,043
1982	4,383	2,271	18,462	9,295	5,042	2,648	27,887	14,214
1983	1,050	817	6,547	4,674	5,747	4,268	13,344	9,759
1984	1,490	685	4,844	2,151	3,453	1,603	9,787	4,439
1975-84 Average	5,782	1,836	27,030	9,162	9,270	3,350	42,082	14,348
1985	3,259	1,141	14,855	5,246	9,134	3,228	27,248	9,615

Sources

Pounds landed and exvessel value of landings 1975-80:

California data for 1975 and 1976 from Fish Bulletin 168 and 170, respectively, published by the California Department of Fish and Game. Unpublished data for 1977-1980 from Eric Knaggs, California Department of Fish and Game.

Oregon data from Pounds and Value of Commercially Caught Fish and Shellfish Landed in Oregon. Oregon Department of Fish and Wildlife.

Washington data from Dale Ward, Washington Department of Fisheries.

Pounds landed and exvessel values of landings for 1981-85 for all three states are from the PacFIN Central Database as of September 10, 1986.

Table 2 - California Pink Shrimp Landings by Port in 1984 and 1985.

<u>Port</u>	<u>1984</u>		<u>1985</u>	
	<u>Lbs</u>	<u>\$</u>	<u>Lbs</u>	<u>\$</u>
Crescent City	1,330,255	602,565	3,165,616	1,104,596
Eureka	19,030	8,659	78,692	27,579
Moss Landing	-	-	1,291	406
Morro Bay	510	406	226	113
Ventura/Other Santa Barbara	12,442	8,667	461	410
Santa Barbara	48,293	25,942	12,513	8,307
Avila	27,463	14,725	-	-
Other San Francisco	25	25	-	-
Los Angeles	51,975	24,057	-	-
TOTAL	1,489,993	685,046	3,258,843	1,141,429

Source: PacFIN Central Database, as of September 10, 1986

Table 3 - Imports of Shrimp into West Coast Customs Districts,¹ 1984 and 1985.

Product Type	Origin	1984		1985	
		Pounds	\$	Pounds	\$
Shell-on, Fresh and Frozen	Norway	310,287	574,260	234,635	124,517
	Other Foreign	74,018,809	330,075,238	78,651,089	320,361,184
	Subtotal	74,321,096	330,649,498	78,885,724	320,485,701
Canned	Norway	164,578	496,542	155,487	297,356
	Other Foreign	10,951,684	20,737,132	13,214,499	24,527,768
	Subtotal	11,116,262	21,233,674	13,369,986	24,825,124
Peeled Raw, Fresh and Frozen	Norway	823,827	1,850,175	557,898	1,213,498
	Other Foreign	20,056,077	44,274,998	29,669,869	64,815,001
	Subtotal	20,879,904	46,125,173	30,227,767	66,028,499
Peeled other, Fresh and Frozen	Norway	7,698,548	19,548,616	8,712,454	19,663,222
	Other Foreign	7,436,035	20,103,818	9,111,977	26,821,221
	Subtotal	15,134,583	39,652,434	17,824,431	46,184,443
Total	Norway ²	8,997,240	22,469,593	9,660,474	21,298,593
	Other Foreign	112,462,605	415,191,186	130,647,434	436,227,174

1 Includes Ports of Entry in Arizona, California, Oregon, and Washington.

2 Total U.S. imports of shrimp from Norway were 15,864,585 pounds worth \$35,098,000 in 1985 and 12,840,661 pounds worth \$32,671,603 in 1984.

Source: U.S. Department of Commerce, Bureau of the Census